

ABSTRACT OF THE INVENTION

A system for transmitting and receiving data formatted in IEEE 1394 standard between devices using a same IEEE 1394 broadcast channel includes a CPU interfaced to a bus, a first 1394 interface connected to the bus via a first physical and link layers, and a second 1394 interface connected to the bus via a second physical and link layer. The CPU is configured for 1) receiving data from the bus, prefixing a header to the received data, and retransmitting the received data with the prefixed header onto the bus; and 2) receiving data prefixed with a header, interpreting the header to identify which of the first or second interfaces should receive the data, and transmitting the data over the bus to the identified 1394 interface.

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